

Work Order ID 70405

Tuesday, June 07, 2011 11:38:23 AM



Page 1

Item ID: D117-762-041

Accept



Setup Start



Revision ID:

Stop



Item Name: Replacement Skidtube

Start Date: 6/7/2011 Start Qty: 1.00

Required Date: 6/10/2011 Req'd Qty: 1.00



Cust Item ID:

Customer:

Reference:

Approvals:

Process Plan:

Date: 11-06-7

Tooling:

Date:

QC:

Date:

SPC (Y/N):

Date:

Run Start



Stop



Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

Draw Nbr

Revision Nbr

D3492

C

D3582

Rev A

100

0.00



DC

DOCUMENT CONTROL

Memo

0.00

Document Control

Photocopy bluefile & type labels per PPP D117-762-041 CHG001

N/A

120

0.00



CNC Bend 1

BENDING MACHINE - SKIDTUBES

Memo

0.00

CNC Delta 100 Bender

Bend tube as per program D3582 on CNC Bender and Dwg D3582. Folio 3,
use bending aid DT9632
2- cut fwd end of tube as per dwg

11-6-8

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
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Run Start



QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop

Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

130

0.00



Skidtubes

0.00

Skidtubes

Memo

1-Cut Aft end using DT8185

2-Deburr ends

3-Drill Aft Cap holes using DT8678 ***DO NOT OPEN AFT CAP HOLE***

4-Locate DT 8973 & Drill Ground wire hole on top of Tube.

5-Install 3/16 cleco in Ground wire hole ,then drill all X-Bolt holes using 3/16" drill.

6-Drill pilot holes for wearplates using DT8974

7-Open wearplate holes to Ø19/64" (0.297") as per Dwg D3582.

8- open ground wear holes to 0.391" as per section B-B

9-Open Aft Cap holes using .209" drill.

10-Drill pilot holes for section D-D and E-E. Holes must be laid out by hand. Mark out Center line and make sure that 6.65 and 5.906 measurements are respected. Double check before drilling, do not open holes to finish size.

11-6-15

BE 11/06/21

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: D17-762-041 PAR #: _____ Fault Category: Skid tubes NCR: Yes No DQA: H Date: 11.06.28
11-690 Resolution: Re work Disposition: Re work QA: N/C Closed: ck Date: 11/06/30

NCR: <u>70405</u>		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A:	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			
<u>11/6/15</u>	<u>#30</u>	<u>operator put Drill jig on inverts. (wrong) (wrong) causing him to Drill holes in the wing areas.</u>	<u>CP</u> <u>11.06.15</u> <u>PS/042</u>	<u>-> there is qty x 4 ^{0.129"} holes in the wing area on one side of the tube. They are not in the same location as the</u>	<u>PS</u> <u>11-6-15</u>	<u>S</u> <u>u/06/21</u>	<u>CP</u> <u>11.06.15</u> <u>PS/042</u>	<u>S</u> <u>u/06/15</u>
		<u>R.C. Lack of Attention!</u>	<u>CP</u> <u>11.06.15</u>	<u>holes that the cross bolt spaces are welded in.</u> <u>Fill with weld, grind smooth. AR mil 7456</u> <u>On nutral axis, NO AFFECT ON STRENGTH</u>	<u>BE</u> <u>11/06/15</u>	<u>S</u> <u>u/06/21</u>	<u>CP</u> <u>11.06.15</u>	<u>S</u> <u>u/06/15</u>
			<u>CP</u> <u>11.06.15</u>				<u>CP</u> <u>11.06.15</u>	<u>S</u> <u>u/06/15</u>

NOTE: Date & initial all entries

[illegible]

Page 3



Setup Start

Abstract

Stop

**Cust Item ID:**[illegible]

Customer:

Reference:

Run Start

Approvals: **Process Plan:** _____ **Date:** _____ **Tooling:** _____ **Date:** _____

Stop

[illegible]

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Insp.
Stamp

0.00

[illegible]

Skidtubes

0.00

Skidtubes

Memo

Skidtubes

1-Weld fwd cap D2964 per dwg D3582 and QSI 004

A/R AL ROD

Batch:

2-Grind flush

0.00

[REDACTED]

QC10- Inspect visual per QSI004- ground welds

0.00

QC

Memo

Quality Control

0.00

[illegible]

QC5- Inspect part completeness to step on W/O

0.00

QC

Memo

Quality Control

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Run Start



QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop



Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
170	Chemical Conversion Coat per QSI005 4.1	0.00							
	HandFinish								
	Memo	0.00							
	Hand Finishing								
180	QC3- Inspect Part Finish	0.00							
	QC								
	Memo	0.00							
	Quality Control								

4/1
u/06/21

1 8 BE12/06/21

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

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Reference:

Run Start



Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Stop



QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

190

0.00



Skidtubes

Skidtubes

Memo

0.00

1-Open X-Bolt holes to finish size as per Dwg D3582, all sections

2-Counter Sink X-BOLT holes as per Dwg D3582

3-Deburr and blow out chips from inside of tube, prep. tube for welding.

4-Bond web as per Dwg D3582 & QSI 015

A/R 241 Sike Flex Batch: M116945

Exp Date: 12-1-15

5-Weld x-bolt spacers(D2973) as per Dwg D3582 section B-B.

A/R AL ROD Batch: M112880

6-Grind welds flush

3 BE 11/06/22

BB 11/06/22

200

QC10- Inspect visual per QSI004- ground welds

0.00



QC

Memo

0.00

Quality Control

Sub 11/06/22

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

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Stop



QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Tool ID

Tool #

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

210

QC5- Inspect part completeness to step on W/O

0.00



QC

Memo

0.00

Quality Control

8/10/12

FC

215

Pressure Wash per QSI005 4.3

0.00



HandFinish

Memo

0.00

Hand Finishing

Touch-up alodine as per QSI

1X Ø M-11/06/22

220

White Gloss(Ref:4.3.5.1) per QSI005 4.3-Alum

0.00



Powdercoat

Memo

0.00

Powder Coating

START TIME

OVEN TEMPERATURE:

FINISH TIME:

8:00
320 OF
8:30

1X Ø M-11/06/23

M116964

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

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Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Stop



QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

230

QC3- Inspect Part Finish

0.00



QC

Memo

0.00

Quality Control

1 6 11 1106123

240

HandFinishing

0.00



HandFinish

Memo

0.00

Hand Finishing

Install Wearplate & Ground Wire inserts as per Dwg D3582.

1 6 11 1106123

W/O:		WORK ORDER CHANGES					
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Stop



QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
250	HandFinishing	0.00							
	HandFinish								
Hand Finishing	Memo	0.00							
	1-Inspect for Foreign objects								
	2-Install Aft cap as per Dwg D3582, Detail "C"								
	A/R 241 Sika Flex Batch: <u>M117516</u>								
	Exp Date: <u>6/1/15</u>								
	3-Install Wearplates as per Dwg D3582 ,								
	Note:Install Bolt and washer on Ground Wire inserts on top of tube see								
	section D-D of dwg D3582								
	*****Do not install bolts where indicated on Dwg(Note #6)*****								
	A/R 241 Sika Flex Batch: <u>M117516</u>								
	Exp Date: <u>6/1/15</u>								
	4-assemble o'ring as per dwg D3492 and apply o'ring lube								
	A/R 55-o'ring lube batch: <u>M114189</u>								
	5- Wing Walk as per Dwg D3582 and QSI 005 4.4								
260	QC5- Inspect part completeness to step on W/O	0.00							
	QC								
Quality Control	Memo	0.00							

1 d 24 u 106127

M117863

8/10/24

70

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

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Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Stop



QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
270 	Packaging	0.00							
Packaging	Memo	0.00							
Packaging	Identify and pack for shipping as per PPP D117-762-041 Location: _____ PPP Rev: <u>PPP 70277</u>								
280 	QC21- Final Inspection - Work Order Release	0.00							
QC	Memo	0.00							
Quality Control									

6/18/24 ①11/6/27 AGMF
11-06-27

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

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Picklist Print

Tuesday, June 07, 2011 11:38:31 AM

Page 1

Work Order ID: 70405

Parent Item: D117-762-041

Parent Item Name: Replacement Skidtube



Start Date: 6/7/2011

Required Date: 6/10/2011

Start Qty: 1.00

Required Qty: 1.00

Comments: IPP Rev:A 07.06.11 New Issue EC
IPP Rev:B 08-02-22 change to revA as per dwg DD verified by:EC

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
D3492-11 		Manufactured	No			250	Each	0.0000	2	2			
Plug								0 70410		42	42	11/06/23	
D3492-13 		Manufactured	No			250	Each	45.0000	6	6			
Plug										42	42	11/06/23	
<div> <div>Location</div> <div>FP-B</div> <div>46693</div> </div> <div> <div>Loc Qty</div> <div>45</div> <div>45</div> </div> <div> <div>Loc Code</div> <div></div> <div></div> </div>													
D3492-9 		Manufactured	No			250	Each	51.0000	2	2			
Plug										42	42	11/06/23	
<div> <div>Location</div> <div>FP-A</div> <div>46694</div> </div> <div> <div>Loc Qty</div> <div>51</div> <div>51</div> </div> <div> <div>Loc Code</div> <div></div> <div></div> </div>													
D2962-150 		Manufactured	No				Each	85.0000		1			
3.540 Outer Tube, Extrud													
<div> <div>Location</div> <div>HALL</div> <div>28672</div> <div>59934</div> </div> <div> <div>Loc Qty</div> <div>85</div> <div>12</div> <div>73</div> </div> <div> <div>Loc Code</div> <div></div> <div></div> <div></div> </div>													

DP 11-6-8

W/O:		WORK ORDER CHANGES					
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Start Qty: 1.00

Required Qty: 1.00

D2964 Manufactured No 140 Each 25.0000 1 1



Cap



BE 11/06/21

Location Loc Qty Loc Code

LG002

25

14101

10

64654

15

D2971 Manufactured No 190 Each 20.0000 1 1



Cross Bolt Spacer



BE 11/06/22

Location Loc Qty Loc Code

LG001

20

44445

20

D3584-1 Manufactured No 190 Each 0.0000 1 1



Web



BE 11/06/21

D2973 Manufactured No 190 Each 145.0000 2 2



Cross Bolt Spacer



B 7/025 #1

BE 11/06/22

Location Loc Qty Loc Code

LG002

145

14636

145

D3662-3 Manufactured No 190 Each 20.0000 1 1



Crossbolt Spacer



BE 11/06/22

Location Loc Qty Loc Code

LG001

20

44456

20

W/O:		WORK ORDER CHANGES					
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Required Date: 6/10/2011

Start Qty: 1.00

Required Qty: 1.00

D3662-1 Manufactured No 190 Each 16.0000 3 3



Crossbolt Spacer



BE 11/06/22

Location Loc Qty Loc Code

LG001 16

64451 16

3

ALS4-1032-130 Purchased No 240 Each 1,850.000 36 36



Insert



HL 11/06/23

Location Loc Qty Loc Code

ST281 8

117331 8

ST282 1842

117717 1842

X36

ALS4-428-165 Purchased No 240 Each 535.0000 2 2



Inserts



HL 11/06/23

Location Loc Qty Loc Code

FP 490

117769 490

FP-B 45

114172 45

X2

D2965 Manufactured No 250 Each 31.0000 1 1



Cap, 105 Skidtube



HL 11/06/23

Location Loc Qty Loc Code

FP006 31

52057 31

X1

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Start Date: 6/7/2011

Required Date: 6/10/2011

Start Qty: 1.00

Required Qty: 1.00

D3508-3

Manufactured No

250

Each

9.0000

1

1



Wearplate



xl 4106127

Location

Loc Qty

Loc Code

FP021

9

38527

1

65192

1

67489

7

D3508-9

Manufactured No

250

Each

2.0000

1

1



Wearplate



xl 4106127

Location

Loc Qty

Loc Code

FP021

2

65193

2

1370307

D3558-3

Manufactured No

250

Each

12.0000

1

1



Gasket



xl 4106123

Location

Loc Qty

Loc Code

FP014

12

67486

12

D3558-9

Manufactured No

250

Each

9.0000

1

1



Gasket



xl 4106122

Location

Loc Qty

Loc Code

FP014

9

55469

9

xl

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Start Qty: 1.00

Required Qty: 1.00

D3558-11 Manufactured No 250 Each 3.0000 1 1

 Gasket  11/06/23



Location Loc Qty Loc Code

FP014 3
 62885 3 B 70342

D3558-13 Manufactured No 250 Each 28.0000 1 1

 Gasket  11/06/23



Location Loc Qty Loc Code

FP014 28
 59558 28

D3508-11 Manufactured No 250 Each 12.0000 1 1

 Wearplate  11/06/23



Location Loc Qty Loc Code

FP016 12
 69941 12

D3508-13 Manufactured No 250 Each 6.0000 1 1

 Wearplate  11/06/23

Location Loc Qty Loc Code

FP016 6
 65191 6

AN960JD10L NAS1149D0332J Purchased No 250 Each 0.0000 2 2

 Washer  11/06/23

Tuesday, June 07, 2011 11:38:32 AM

Shop Packet Print

Page 5

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

Tuesday, June 07, 2011 11:38:32 AM

Work Order ID: 70405

Parent Item: D117-762-041

Parent Item Name: Replacement Skidtube

Start Date: 6/7/2011

Required Date: 6/10/2011

Start Qty: 1.00

Required Qty: 1.00

AN3C4A

Purchased

No

250

Each

2,157.000

28

28



BOLT



28 11/06/23

Location

Loc Qty

Loc Code

ST350

2157

117094

655

117313

2

117688

800

117795

500

117872

200

x28

AN3C5A

Purchased

No

250

Each

1,779.000

2

2



Bolt



2 11/06/23

Location

Loc Qty

Loc Code

FP-A

7

115835

7

ST350

1772

116419

118

116549

54

117343

500

117508

300

117764

300

117872

500

x2

AN960JD416L

NAS1149D0416J

Purchased

No

250

Each

3.0000

2

2



Washer



2 11/06/23

Location

Loc Qty

Loc Code

FP-B

3

110153

3

116513

x2

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

Page 7

Tuesday, June 07, 2011 11:38:33 AM

Work Order ID: 70405

Parent Item: D117-762-041

Parent Item Name: Replacement Skidtube

Start Date: 6/7/2011

Required Date: 6/10/2011

Start Qty: 1.00

Required Qty: 1.00

AN960C10L NAS1149C0332 Purchased No 250 Each 0.0000 28 28



washer

AN4-4A

Purchased No

250 Each 102.0000 2 2



Bolt

117887



(x28) M 1106127

Location

Loc Qty

Loc Code

FP-B

48

114615

48

x2

ST356

54

114615

54

NAS1611-012 Purchased No

250 Each 68.0000 6 6



O-RING



M 1106127

Location

Loc Qty

Loc Code

FP-A

68

113845

68

x6

NAS1611-015 Purchased No

250 Each 91.0000 2 2



O-RING



M 1106127

Location

Loc Qty

Loc Code

FP-A

91

115101

91

116681

12

Tuesday, June 07, 2011 11:38:33 AM

Shop Packet Print

Page 7

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

Page 8

Tuesday, June 07, 2011 11:38:33 AM

Work Order ID: 70405



Parent Item: D117-762-041



Parent Item Name: Replacement Skidtube

Start Date: 6/7/2011

Required Date: 6/10/2011

Start Qty: 1.00

Required Qty: 1.00

NAS1611-016

Purchased

No

250

Each

109.0000

2

2



11/06/23

O-RING

Location

Loc Qty

Loc Code

FP-A

109

107178

7

112492

58

113524

44

12

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

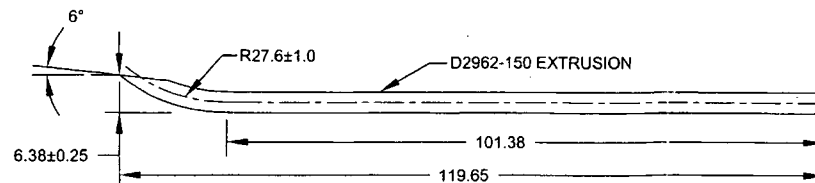
NOTE: Date & initial all entries

PARTS LIST FOR D3582-041 SKIDTUBE ASSEMBLY

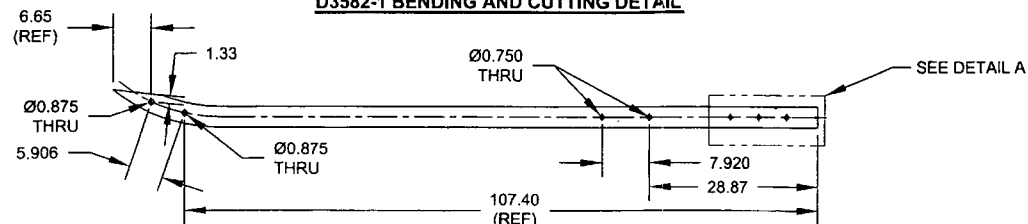
Qty	Part Number	Description
X	D3582-041	SKIDTUBE ASSEMBLY
1	D2962-150	EXTRUSION
1	D2964	CAP
1	D2965	CAP
1	D2971	CROSS BOLT SPACER
2	D2973	CROSS BOLT SPACER
2	D3492-049	PLUG ASSEMBLY
2	D3492-051	PLUG ASSEMBLY
6	D3492-053	PLUG ASSEMBLY
1	D3508-3	WEARPLATE
1	D3508-9	WEARPLATE
1	D3508-11	WEARPLATE
1	D3508-13	WEARPLATE
1	D3558-3	GASKET
1	D3558-9	GASKET
1	D3558-11	GASKET
1	D3558-13	GASKET
1	D3584-1	WEB
3	D3662-1	CROSS BOLT SPACER
1	D3662-3	CROSS BOLT SPACER
36	AELS-1032-130	INSERT
2	ALS7-428-165	INSERT
28	AN3C4A	BOLT
2	AN3-5A	BOLT
2	AN4-4A	BOLT
28	AN960C10L	WASHER
2	AN960JD10L	WASHER
2	AN960JD416L	WASHER

GENERAL NOTES:

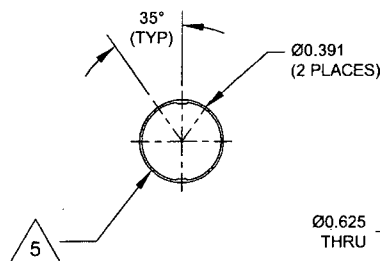
- ALL DIMENSIONS ARE IN INCHES
- TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- WELDING TO BE DONE PER DART QSI 004.
- INSERT D3584-1 WEB TO LOCATION SHOWN OFF AFT END OF SKIDTUBE AND BOND WEB INTO OUTER TUBE WITH NON-STRUCTURAL SIKAFLEX-241/-291 ADHESIVE PER DART QSI 015 AFTER BENDING.
- USE DART DRILL TEMPLATE DT8900 TO LOCATE AND DRILL Ø0.297 HOLES (36 PLACES) FOR WEARSHOE INSERTS. INSTALL AELS-1032-130 PER SECTION G-G (36 PLACES) AFTER FINISH. SEAL WEARPLATE BOLTS WITH SIKAFLEX-241/-291.
- DO NOT INSTALL AN3C4A BOLTS AND AN960C10L WASHERS IN INDICATED LOCATIONS.
- FINISH:
 - CHEMICAL CONVERSION COAT PER DART QSI 005 4.1 PRIOR TO INSERTING D3584-1 WEB.
 - POWDER COAT ASSEMBLY GLOSS WHITE (REF 4.3.5.1) PER DART QSI 005 4.3.
 - ANTI-SKID PAINT AS INDICATED TO 1.00 ABOVE CENTER LINE PER DART QSI 005 4.4



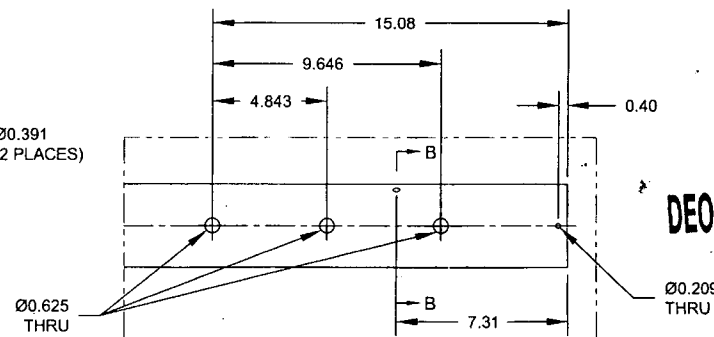
D3582-1 BENDING AND CUTTING DETAIL



D3582-1 DRILLING DETAIL



SECTION B-B
SCALE 1:5



DETAIL A
SCALE 1:5

DEO ATTACHED

RELEASED
07-11-22

SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 70406

PH-2-7

A	NEW ISSUE	PH	07.06.08
REV.	DESCRIPTION	BY	DATE
DESIGN	PH		
DRAWN	PH		
CHECKED			
MFG. APPR.			
APPROVED			
DE APPR.			
DATE	07.06.08		

DART AEROSPACE USA, INC
PORT HADLOCK, WA

DRAWING NO. D3582
REV. A
SHEET 1 OF 2
SCALE 1:20

BK 117 SKIDTUBE ASSEMBLY

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NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT
WRITTEN PERMISSION FROM DART AEROSPACE USA, INC.

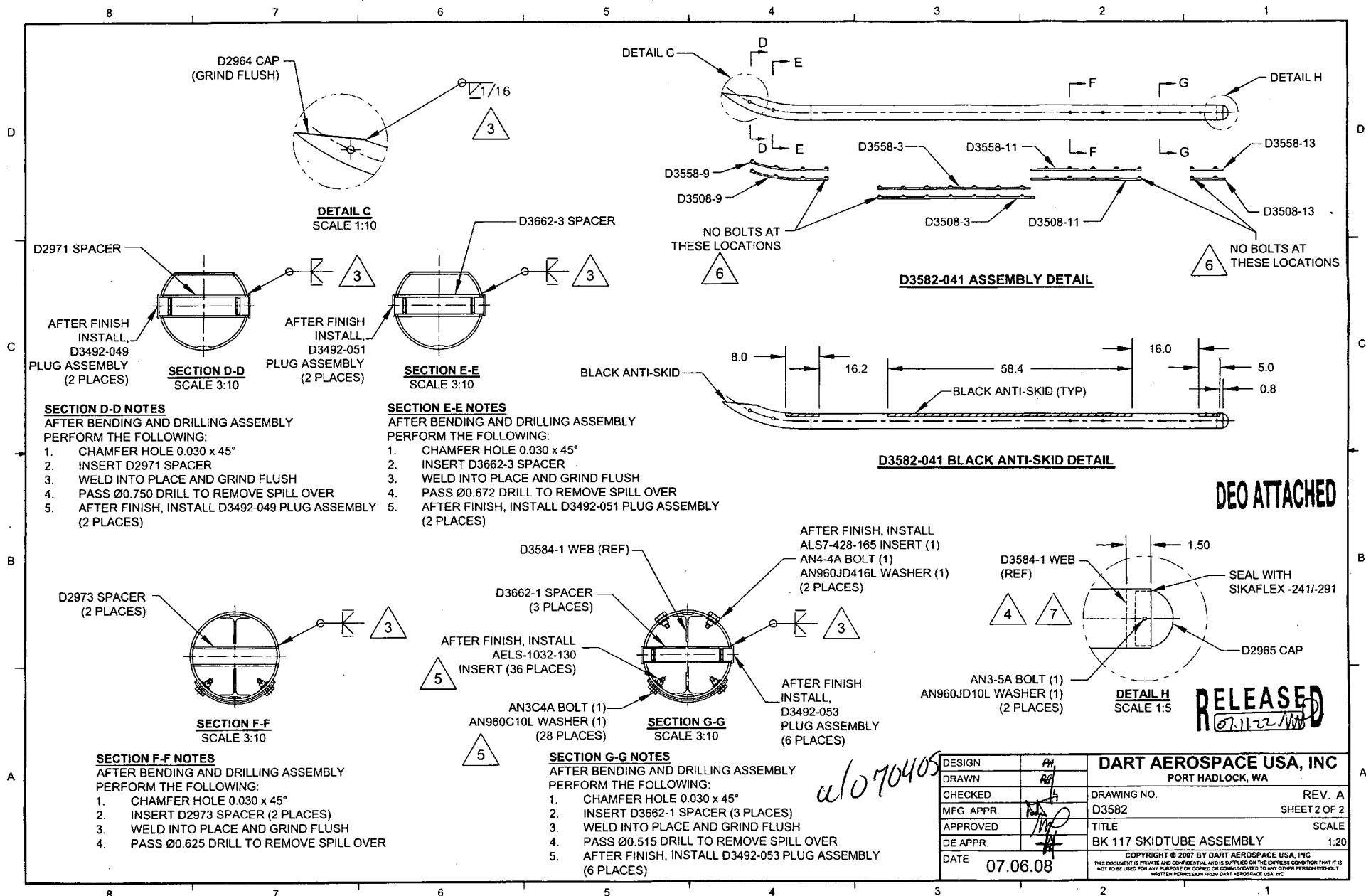
W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries



W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

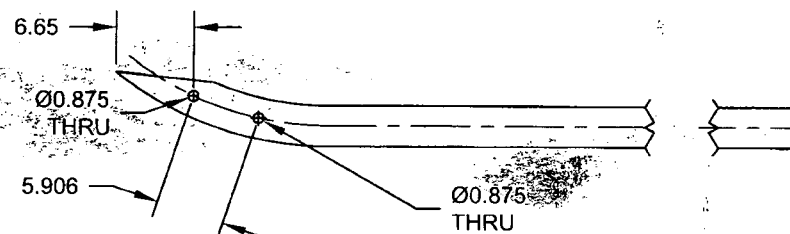
NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

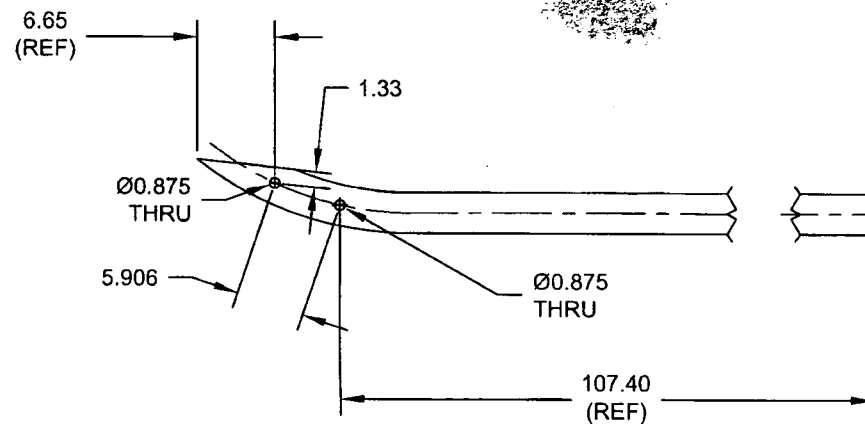
DRAWING NO. D3582	TITLE BK 117 SKIDTUBE ASSEMBLY	REV. A	DART AEROSPACE USA, INC ENGINEERING ORDER		D.E.O. NO. D3582-A-1	SHEET NO. SHEET 1 OF 1	SCALE NTS
DRAWN <i>PH</i>	CHECKED <i>B</i>	MFG. APPR. <i>BE</i>	APPROVED <i>MD</i>		DE APPR. <i>MA</i>		
DATE 09.04.06	DATE 04.04.06	DATE 09.04.06	DATE 12/24/06		DATE 09.04.06		

FOR EASE OF MANUFACTURE AND TO ENSURE THE FIT OF BRISTOL WIRESTRIKE SKID GEAR DEFLECTOR:
UPDATE DIMENSIONING OF 2 FWD HOLES ON SHEET 1 AS SHOWN

IS:



WAS:



u/b 704105

RELEASED
09/04/22 *MD*

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

NO. 245

AWS D17.1.2001
QUALIFICATION TEST RECORD

Name: Barclay Elliott
Job number: 65186
Part number: D117-762-041
Description: 117 skid tube
Welding Process: Tig[☒] Mig[]
Base material: Aluminum
Current: AC[] DC[☒]

TEST REQUIREMENTS AND RESULTS

Visual: pass[☒] fail[]
Penetration: pass[☒] fail[]

UNACCEPTABLE

Cracks: pass[☒] fail[]
Undercut: pass[☒] fail[]
Pin holes: pass[☒] fail[]
Overlap (cold lap): pass[☒] fail[]
Porosity (surface): pass[☒] fail[]
Coloration: pass[☒] fail[]

Qualifier Lat. Lynn Date of Test Coupon 11-01-31
Welder Barclay Elliott Date of Test Coupon 11-01-31

The above named individual is qualified in accordance with AWS D17.1.2001 to weld